

Work Order ID 145882

Friday, May 06, 2016 10:53:33 AM

145882

Page 1

Item ID: K642-511 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle 642-511
 Start Date: 4/28/2016 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 5/5/2016 Req'd Qty: 2.00 ***2*** Customer:

Reference:

Approvals: Process Plan: *[Signature]* Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN-D206-642	Q

100	Document Control	0.00							
100	DOCUMENT CONTROL		DAS						
DC	Memo	0.00	6						
Doc.Control -USB or Paperwork	Create White labels per PPP K642-511	CHG005	9-89		MAY / 4 2016				

MCS 16-05-16
(2)

JUN 0 9 2016

110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

DAS
 28
 9-89

MAY / 4 2016

120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.06							
Quality Control									

DAS
 27
 9-89

JUN 9 0 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	Past Due ☐							

Work Order ID 145882

Friday, May 06, 2016 10:53:33 AM

145882

Page 2

Item ID: K642-511 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle 642-511
Start Date: 4/28/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/5/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP K642-511 Location: <u>fs123</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.20							
Quality Control									

JUN 06 2016
MCS

JUN 06 2016
MCS

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	Past Due ☐							

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 1

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A07.06.05 new issueEC
IPP Rev.B 08.02.05 , Per ECN1080P LL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D206-648-013 *D206-648-013* Ground Handling Wheel Modification		Manufactured	No			110	Each	6.0000	1	2			DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST636				6					
				135552				2					
				136219				4					
D2932-1 *D2932-1* Saddle LH Out, 206		Manufactured	No			110	Each	9.0000	1	2			DAS 6 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST396				9					
				136132				9					
D2933-1 *D2933-1* Saddle LH In, 206		Manufactured	No			110	Each	9.0000	1	2			DAS 6 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST396				9					
				136247				3					
				141087				6					
D2938-1 *D2938-1* Saddle LH Out, 206		Manufactured	No			110	Each	3.0000	1	2			DAS 6 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST395				3					
				136261				3					

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐											

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 2

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D2939-1
D2939-1

Saddle LH In, 206

DAS
27
9-89

Manufactured No

110 Each

4.0000

1 2

**

DAS
28
9-89
DAS
6
9-89

Location

Loc Qty

Loc Code

ST395

4

143622

4

2

AN3C41A

AN3C41A

Bolt

Purchased No

110 Each

338.0000

8 16

**

DAS
28
9-89
DAS
6
9-89

Location

Loc Qty

Loc Code

FG

10

122843

5

124975

1

m130081

4

ST338a

225

131651

75

m132169

75

m132522

75

ST347

103

m131367

28

m132381

75

7

12

D2652

D2652

Bushing

DAS
27
9-89

Manufactured No

110 Each

351.0000

16 32

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

45

31985

45

ST009

306

141609

306

DAS
6
9-89

JUN 03 2016

32

Friday, May 06, 2016 10:53:31 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER :							

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 3

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

MS21043-3

Purchased

No

110

Each

943.0000

20

40

MS21043-3

Nut

**

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

DAS
6
9-89

FG

80

103691

80

FP001

11

m130673

11

GA

385

m133990

385

ST302

361

m134502

361

ST304

106

m131340

106

40

D3672-7

Manufactured

No

110

Each

1,078.000

24

48

D3672-7

Washer, Phenolic

**

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

DAS
6
9-89

FG

40

129987

25

133986

15

ST049

38

137756

38

ST051A

1000

134786

500

142572

500

48

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 4

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN5C11A

Purchased

No

110

Each

108.0000

8

16

AN5C11A

Bolt

**

DAS 28
6 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

FG

4

103715

4

over003

100

M131305

50

M131024

50

ST338

4

M128739

4

AN5C12A

Purchased

No

110

Each

79.0000

4

8

AN5C12A

BOLT

**

DAS 28
6 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

FG

2

18918

2

ST338

77

M129245

77

AN5C13A

Purchased

No

110

Each

83.0000

4

8

AN5C13A

BOLT

**

DAS 28
6 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

over003

75

M130466

75

ST338

8

M127363

8

DAS 28
6 9-89
JUN 03 2016

Friday, May 06, 2016 10:53:31 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
										QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐											

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 5

Work Order ID: 145882

Parent Item: K642-511

Parent Item Name: Saddle 642-511

145882***K642-511***

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

NAS1149C0532R

Purchased

No

110

Each

241.0000

8

16

NAS1149C0532R

WASHER

**

DAS
28
6
9-89LocationLoc QtyLoc Code

GA

60

116513

60

ST266

181

m133031

177

m134181

4

16

AN4C6A

Purchased

No

110

Each

353.0000

12

24

AN4C6A

Bolt

**

DAS
28
9-89LocationLoc QtyLoc Code

FG

14

103344

4

121657

10

OVER002

300

m134502

300

ST345

39

m133990

39

24

DAS
6
9-89

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Page 6

Friday, May 06, 2016 10:53:31 AM

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D3672-3 Manufactured No

110

Each

1,117.000

24

48

**

DAS
6
9-89
DAS
28
9-89

D3672-3

Washer, Phenolic

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

100

133083

52

134449

48

FP001

213

132639

213

ST049

304

139583

304

ST051A

500

142571

500

48

NAS1149C0432R

Purchased

No

110

Each

1,857.000

24

48

**

DAS
28
9-89

NAS1149C0432R

WASHER

Location

Loc Qty

Loc Code

GA

428

m125807

428

ST266

1429

m134073

429

m134676

1000

48

DAS
27
9-89

DAS
6
9-89

JUN 03 2016

Friday, May 06, 2016 10:53:31 AM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 7

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

MS21043-4

Purchased

No

110

Each

889.0000

13

26

MS21043-4

Nut

**

DAS
DAS 28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

40

104603

40

GA

95

m132803

95

OVER007

300

m134502

300

ST302

454

m133769

12

m134249

142

m134634

300

26

D3407-043

Manufactured

No

110

Each

10.0000

1

2

D3407-043

Tow Ring

**

DAS
DAS 28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

st530

10

136685

10

2

D3456-1

Manufactured

No

110

Each

110.0000

1

2

D3456-1

Washer

**

DAS
DAS 28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

7

25701

7

ST038

3

141125

3

ST038A

100

141989

50

144158

50

2

Friday, May 06, 2016 10:53:31 AM

Shop Packet Print

Page 7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER :									

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 8

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D2712

Manufactured No

110

Each

319.0000

10

20

D2712

Set Screw

**

DAS
6 28
9-89 9-89

Location

Loc Qty

Loc Code

FG 55

29962 55

ST009 64

135950 54

89929 10

ST012a 200

140532 100

141690 100

20

D3457-1

Manufactured No

110

Each

34.0000

2

4

D3457-1

Washer

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FG 10

32409 10

ST037 8

127393 8

ST038 16

138904 16

DAS
6
9-89

D2934

Manufactured No

110

Each

42.0000

2

4

D2934

Saddle Spacer

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FG 6

31929 6

ST014 36

136116 4

141428 32

DAS
6
9-89

2
2

Friday, May 06, 2016 10:53:31 AM

Shop Packet Print

Page 8

SUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 9

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D2935

Manufactured No

110

Each

22.0000

2

4

D2935

Saddle Spacer

**

DAS
28
6 9-89
9-89

Location

Loc Qty

Loc Code

FG

6

31793

6

ST014

16

141082

16

AN3C36A

Purchased No

110

Each

288.0000

9

18

AN3C36A

Bolt

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

47

101261

4

122204

2

m131367

1

m132169

40

FP001

80

m131856

1

m132381

79

OVER002

135

m132522

55

m133916

80

ST347

26

131651

26

DAS
6
9-89

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 10

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN3C35A

Purchased

No

110

Each

59.0000

3

6

AN3C35A

Bolt

**

DAS 28 9-89
6 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

4

18914

4

OVER002

20

M132317

20

ST347

35

M128398

3

M130851

1

M133077

6

M133694

25

NAS1149C0332R

Purchased

No

110

Each

3,049.000

247

48

NAS1149C0332R

WASHER

**

DAS 28 9-89
6 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

1582

m132262

4

m132930

1004

m134063

446

m134073

128

GA

225

m133284

225

ST266

1242

m134474

142

m134574

1000

m134654

100

48

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
				OTHER : ☐					

Picklist Print

Friday, May 06, 2016 10:53:31 AM

Page 11

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D3396-3
D3396-3
Bushings

Manufactured No

110 Each 24.0000 2 4

**

DAS
28
DAS
6
9-89

Location

Loc Qty

Loc Code

ST034

24

109098

2

123680

1

132598

21

2
1
1

D3672-1
D3672-1
Washer, Phenolic

Manufactured No

110 Each 634.0000 24 48

**

DAS
28
DAS
6
9-89

Location

Loc Qty

Loc Code

FG

10

85222

10

FP001

70

112218

70

ST049

54

127322

54

ST051A

500

134785

500

48

AN5C35A
AN5C35A
Bolt

Purchased No

110 Each 65.0000 1 2

**

DAS
28
DAS
6
9-89

Location

Loc Qty

Loc Code

ST336

65

M128894

1

M129871

64

1

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY								
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐			Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐			Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
		OTHER : ☐								

Picklist Print

Page 12

Friday, May 06, 2016 10:53:31 AM

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN5C15A

Purchased

No

110

Each

23.0000

1

2

AN5C15A

Bolt

**

DAS
6 28
9-89

Location

Loc Qty

Loc Code

ST337

23

M130466

23

2

AN5C32A

Purchased

No

110

Each

135.0000

2

4

AN5C32A

BOLT

**

DAS
6 28
9-89

Location

Loc Qty

Loc Code

FG

4

18918

4

over004

100

131650

100

ST336

31

m132102

31

4

DAS
27
9-89

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : _____									

Picklist Print

Page 13

Friday, May 06, 2016 10:53:31 AM

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN5C34A

Purchased

No

110

Each

116.0000

2

4

AN5C34A

Bolt

**

DAS 6 28 9-89

Location

Loc Qty

Loc Code

FG

2

18918

2

over004

91

m130033

19

m131855

8

m131856

8

m132169

8

m132381

8

m132522

8

m132674

8

m133332

8

m133921

8

m134131

8

ST286A

4

m131177

4

m132522

0

ST336

19

m131854

3

m133917

8

m133920

8

DAS 27 9-89

MAY 13 2016

Friday, May 06, 2016 10:53:31 AM

Shop Packet Print

Page 13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Page 14

Friday, May 06, 2016 10:53:31 AM

Work Order ID: 145882

145882

Parent Item: K642-511

K642-511

Parent Item Name: Saddle 642-511

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

MS21043-5

Purchased

No

110

Each

208.0000

4

8

**

DAS
28
9-89

MS21043-5

Nut

JUN 03 2016

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST302

112

m132382

12

m134502

100

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

REFERENCE ONLY

DART AEROSPACE USA, INC.

IIN-D206-642

Page 33 of 43

4.7 206L/L-1/L-3/L-4/407 HIGH GEAR FLOAT SKIDTUBES (TRI-BAG COMPATIBLE)

ITEM	QTY -511	QTY -512	QTY -515	QTY -516	QTY -541	QTY -557	QTY -549	QTY -551	QTY -013	PART NUMBER	DESCRIPTION
	X									D206-642-511	SKIDTUBE INSTALLATION, LH
		X								D206-642-512	SKIDTUBE INSTALLATION, RH
			X							D206-642-515	SKIDTUBE INSTALLATION, LH
				X						D206-642-516	SKIDTUBE INSTALLATION, RH
1	1	1			X					D206-642-541	SKIDTUBE
						X				D206-642-557	WEARSHOE KIT (REPLACES -547 KIT)
							X			D206-642-549	RUN-ON LANDING WEARPLATE KIT
			1	1				X		D206-642-551	SKIDTUBE
1	1	1	1	1					X	D206-648-013	GROUND HANDLING KIT
1					1					D3274-041	SKIDTUBE ASSEMBLY
1								1		D4362-041	SKIDTUBE ASSEMBLY
3					1			1		D2646	* AFT CAP ⁽¹⁾
4					2			2		AN3C4A	* BOLT ⁽¹⁾
5A					2			2		NAS1149C0332R	* WASHER ⁽¹⁾ (OR AN960C10L)
5B					2			2		D3672-1	* WASHER (REPLACES NAS1515H3L) ⁽¹⁾
6	1		1							D2932-1	* SADDLE, FWD OUT, LH
6		1		1						D2932-2	SADDLE, FWD OUT, RH
7	1		1							D2933-1	SADDLE, FWD IN, LH
7		1		1						D2933-2	SADDLE, FWD IN, RH
8	1		1							D2938-1	SADDLE, AFT OUT, LH
8		1		1						D2938-2	SADDLE, AFT OUT, RH
9	1		1							D2939-1	SADDLE, AFT IN, LH
9		1		1						D2939-2	SADDLE, AFT IN, RH
10	8	8	8	8						AN3C41A	BOLT
11	16	16	16	16						D2652	BUSHING
12A	8	8	8	8						MS21043-3	NUT
12B	16	16	16	16						D3672-7	WASHER (REPLACES NAS1515H5)
13	4	4	4	4						AN5C11A	* BOLT ⁽²⁾
										(or AN5C12A)	
14	4	4	4	4						AN5C11A	* BOLT ⁽²⁾
										(or AN5C13A)	
15A	8	8	8	8						NAS1149C0532R	WASHER (OR AN960C516L)
15B	8	8	8	8						D3672-7	WASHER (REPLACES NAS1515H5L)
16	12	12	12	12						AN4C6A	BOLT
17A	24	24	24	24						D3672-3	WASHER (REPLACES NAS1515H4L)
17B	24	24	24	24						NAS1149C0432R	WASHER (OR AN960C416L)
18	12	12	12	12						MS21043-4	NUT
20A					9	9				D3537-1	* WEARPAD ⁽¹⁾ (REPLACES D2648-3)
21A					1	1				D3537-3	* WEARPAD ⁽¹⁾ (REPLACES D3429-1)
22A					1	1				D4956-15	* WEARSHOE ⁽¹⁾ (REPLACES D3535-15 + D3536-15)
23A					1	1				D4956-23	* WEARSHOE ⁽¹⁾ (REPLACES D3535-23 + D3536-23)
24A					1	1				D4956-39	* WEARSHOE ⁽¹⁾ (REPLACES D3535-39 + D3536-39)
25A					1	1				D4956-35	* WEARSHOE ⁽¹⁾ (REPLACES D3535-35 + D3536-35)
26A			8	8	78	78	8			AN3C4A	* BOLT ⁽¹⁾
26B			8	8	78	78	8			NAS1149C0332R	* WASHER ⁽¹⁾ (OR AN960C10L)
26C			8	8	78		8			ALS7-1032-130	* INSERT ⁽¹⁾
										(or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)	
30	1	1	1	1						D3407-043	TOW RING
32A	1	1	1	1						D3456-1	WASHER
32B	2	2	2	2						D3457-1	WASHER
33	1	1	1	1						MS21043-4	NUT
34			1	1	1					AN4C5A	BOLT
35			1	1	1					NAS1149C0463R	WASHER (OR AN960C416)
36			1	1	1					D3413-1	RING
37	10	10	10	10						D2712	SET SCREW
38	2	2	2	2						D2934	SADDLE SPACER
39	2	2	2	2						D2935	SADDLE SPACER

• COPYRIGHT © 2000 BY DART AEROSPACE USA, INC. •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Revision: Q

Date: 13.08.12

REFERENCE ONLY

DART AEROSPACE USA, INC.

IIN-D206-642

Page 34 of 43

ITEM	QTY -511	QTY -512	QTY -515	QTY -516	QTY -541	QTY -557	QTY -549	QTY -551	QTY -013	PART NUMBER	DESCRIPTION
40									2	D3414-041	LUG ASSEMBLY (GHW)
41									4	AN3C37A	BOLT
42									8	D2652	BUSHING
43									4	MS21043-3	NUT
44									4	NAS1149C0363R	WASHER (OR AN960C10)
50	9	9	3	3						AN3C36A	BOLT
51	3	3	3	3						AN3C35A	BOLT
52	24	24	12	12						NAS1149C0332R	WASHER (OR AN960C10L)
53	24	24	12	12						D3672-1	WASHER (REPLACES NAS1515H3L)
54	12	12	6	6						MS21043-3	NUT
55	2	2	2	2						D3396-3	SPACER
56A	1	1	1	1						AN5C35A	BOLT
56B	1	1	1	1						AN5C15A	BOLT
60	2	2	2	2						AN5C32A	BOLT
61	2	2	2	2						AN5C34A	BOLT
62	4	4	4	4						MS21043-5	NUT
80							1	1		D4368-041	FWD WEARPLATE ASSY
81							1	1		D4368-043	AFT WEARPLATE ASSY
82A							1	1		D4383-1	WEARPAD
82B							1	1		D4383-3	WEARPAD
83							20	20		D3873-3	BUSHING
84								24		D3411-3	WASHER
85							2			D3275-1	SPACER
86A							6	6		AN3C40A	BOLT
86B							2	2		AN3C37A	BOLT
86C							2	2		AN3C36A	BOLT
87							10	10		MS21043-3	NUT

NOTES: (1) DENOTES THAT PART IS INCLUDED WITH D3274-041 OR D4362-041 ASSEMBLY ABOVE
(2) CHOICE OF BOLT WILL DEPEND ON CROSSTUBE (SEE INSTALLATION PROCEDURE)

• COPYRIGHT © 2000 BY DART AEROSPACE USA, INC. •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Revision: Q
Date: 13.08.12